

AMENDMENTS TO THE CLAIMS

Listing of Claims

1. (currently amended) A process of manufacturing a hollow plastic product with two open ends and a substantially tubular section, the process comprising the steps of:

(a) providing a cavity mold part that includes a generally cylindrical portion for forming at least ~~an~~ a first outside surface segment of a substantially tubular section of a molded hollow plastic product that has one open end, one closed end and a substantially tubular section;

(b) providing a core mold part that includes a generally cylindrical portion for forming at least ~~an~~ a first inside surface segment of the substantially tubular section of the molded plastic product;

(c) combining the cavity mold part with the core mold part to configure a mold cavity for forming the molded plastic product;

(d) injecting plastic material into the mold cavity to form the molded plastic product;

(e) separating the core mold part from the cavity mold part while retaining the molded plastic product on the core mold part;

(f) removing the molded plastic product from the core mold part; and

(g) after step (f) and during the manufacturing process, removing at least a portion of the closed end of the molded plastic product to provide a manufactured hollow plastic product with two open ends and a substantially tubular section;

wherein step (f) comprises injecting compressed air into the closed end of the

molded product to thereby at least help remove the molded product from the core mold part.

2. (original) A process according to Claim 1, wherein step (f) comprises the step of:

(h) injecting compressed air through the core mold part into the closed end of the molded product.

3. (currently amended) A process according to Claim 1, wherein the product has a substantially tubular wall and further includes a thread at on the outside surface of at one end of the product wall,

wherein step (a) comprises the step of:

(h) providing a said cavity mold part that includes a thread-forming portion for forming the thread ~~of the product;~~

wherein step (b) comprises the step of:

(i) providing a said core mold part that includes an inner core that is movable relative to the generally cylindrical portion of the core mold part for forming ~~an a second~~ inside surface segment of the substantially tubular wall of the product lying inside the thread when the inner core is protracted relative to the generally cylindrical portion of the core mold part, wherein the second inside surface segment lies opposite the thread;

wherein step (c) further comprises the step of:

(j) protracting the inner core relative to the generally cylindrical portion of the core mold part to further configure the mold cavity for forming the product;

wherein the process further comprises the step of:

(k) subsequent to injection of the plastic according to step (d), retracting the inner core relative to the generally cylindrical portion of the core mold part; and

wherein separation of the core mold part from the cavity mold part according to step (e) thereby removes the thread from the thread-forming portion of the cavity mold part.

4. (currently amended) A process of manufacturing a hollow plastic product with a substantially tubular ~~section~~ wall and a thread ~~at on~~ the outside surface ~~of at~~ one end of the ~~product~~ wall, the process comprising the steps of:

(a) providing a cavity mold part that includes (i) a generally cylindrical portion for forming at least ~~an~~ a first outside surface segment of a substantially tubular ~~section~~ wall of a hollow plastic product that also has a thread ~~at on~~ the outside surface ~~of at~~ one end of the ~~product~~ wall and (ii) a thread-forming portion for forming the thread ~~of the~~ product;

(b) providing a core mold part that includes (i) a generally cylindrical portion for forming at least ~~an~~ a first inside surface segment of the substantially tubular ~~section~~ wall, wherein the first inside surface segment lies opposite the first outside surface segment, of ~~the product~~ and (ii) an inner core that is movable relative to the generally cylindrical portion of the core mold part for forming ~~an~~ a second inside surface segment of the substantially tubular wall ~~of the product lying inside the thread~~ when the inner core is protracted relative to the generally cylindrical portion of the core mold part, wherein the second inside surface segment lies opposite the thread;

(c) combining the cavity mold part with the core mold part with the inner core being protracted relative to the generally cylindrical portion of the core mold part to configure a mold cavity for forming the product;

(d) injecting plastic material into the mold cavity to form the molded plastic product; and

(e) retracting the inner core relative to the generally cylindrical portion of the core mold part; and

(f) separating the core mold part from the cavity mold part to thereby remove the thread from the thread-forming portion of the cavity mold part while retaining the molded product on the core mold part.

Claims 5-11 (cancelled)

12. (currently amended) Apparatus for manufacturing a hollow plastic product with two open ends and a substantially tubular section, comprising:

a cavity mold part that includes a generally cylindrical portion for forming at least ~~an~~ a first outside surface segment of a substantially tubular section of a molded hollow plastic product that has one open end, one closed end and a substantially tubular section;

a core mold part that includes a generally cylindrical portion for forming at least ~~an~~ a first inside surface segment of the substantially tubular section of the molded plastic product;

wherein a mold cavity for forming the molded plastic product is configured when the cavity mold part is combined with the core mold part, and the molded product is

formed by injecting plastic material into the mold cavity;

means for injecting compressed air into the closed end of the molded product to thereby at least help remove the molded product from the core mold part after the core mold part has been separated from the cavity mold part while retaining the molded product on the core mold part; and

~~manufacturing~~ means for removing at least a portion of the closed end of the molded plastic product after the molded product has been removed from the core mold part and during manufacture of the product to provide a manufactured hollow plastic product with two open ends and a substantially tubular section.

13. (original) Apparatus according to Claim 12, wherein the core mold part includes means for channeling compressed air through the core mold part into the closed end of the molded product.

14. (currently amended) Apparatus according to Claim 12, wherein the product has a substantially tubular wall and further includes a thread at on the outside surface of at one end of the product wall,

wherein the cavity mold part includes a thread-forming portion for forming the thread ~~of the product;~~

wherein the core mold part includes an inner core that is movable relative to the generally cylindrical portion of the core mold part for forming ~~an~~ a second inside surface segment of the substantially tubular wall of the product lying inside the thread when the inner core is protracted relative to the generally cylindrical portion of the core mold part, wherein the second inside surface segment lies opposite the thread;

wherein the mold cavity for forming the molded product with a thread at on the outside surface at ~~of~~ one end of the ~~product wall~~ is configured when the cavity mold part is combined with the core mold part and the inner core is protracted relative to the generally cylindrical portion of the core mold part; and

wherein the apparatus comprises:

means for separating the core mold part from the cavity mold part after the inner core is retracted relative to the generally cylindrical portion of the core mold part to thereby remove the thread from the thread-forming portion of the cavity mold part while retaining the molded product on the core mold part.

15. (currently amended) Apparatus for manufacturing a hollow plastic product with a substantially tubular ~~section wall~~ and a thread at on the outside surface of ~~at~~ one end of the ~~product wall~~, comprising:

a cavity mold part that includes (i) a generally cylindrical portion for forming at least ~~an~~ a first outside surface segment of a substantially tubular ~~section wall~~ of a hollow plastic product that also has a thread at on the outside surface of one end of the ~~product wall~~ and (ii) a thread-forming portion for forming the thread ~~of the product~~;

a core mold part that includes (i) a generally cylindrical portion for forming at least ~~an~~ a first inside surface segment of the substantially tubular ~~section wall, wherein the first inside surface segment lies opposite the first outside surface segment, of the product~~ and (ii) an inner core that is movable relative to the generally cylindrical portion of the core mold part for forming ~~an~~ a second inside surface segment of the substantially tubular wall of the product lying inside the thread when the inner core is protracted

relative to the generally cylindrical portion of the core mold part, wherein the second inside surface segment lies opposite the thread;

wherein a mold cavity for forming a molded product with a substantially tubular section and a thread ~~at~~ on the outside surface at ~~of~~ one end of the ~~product~~ wall is configured when the cavity mold part is combined with the core mold part and the inner core is protracted relative to the generally cylindrical portion of the core mold part, and the molded product is formed by injecting plastic material into the mold cavity;

means for separating the core mold part from the cavity mold part after the inner core is retracted relative to the generally cylindrical portion of the core mold part to thereby remove the thread from the thread-forming portion of the cavity mold part while retaining the molded product on the core mold part.